



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,041	11/14/2003	Alan H. Anderson	7707.0019-02	7520
22852	7590	09/09/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			DINH, TIEN QUANG	
			ART UNIT	PAPER NUMBER
			3644	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,041

Applicant(s)

ANDERSON ET AL.

Examiner

Tien Dinh

Art Unit

3644

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-67 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 61-67 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/14/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 61 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Kam et al.

Kam et al discloses a one piece closed shape structure having an outer shell 12 and a frame 18 formed on the interior portion of the outer shell. The outer shell and the frame are co-cured.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kam et al in view of Cappa.

Kam et al discloses all claimed parts except for the core material between the inner and outer skin. However, Cappa discloses that a core 38 between an inner and out skin is well known in the art.

Art Unit: 3644

It would have been obvious to one skilled in the art at the time the invention was made to have used a core material in the outer shell of Kam et al as taught by Cappa to create a stronger shell.

Claims 61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams or Cronkhite et al in view of Kam et al and Cappa.

Williams or Cronkhite et al discloses a one-piece closed shape structure with an outer shell and frames formed on the interior portion of the outer shell but is silent on the co-cured process and the core material. However, Kam et al teaches that co-cured structures are well known in the art. Cappa discloses that a core 38 between an inner and out skin is well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have used a core material in the outer shell of Hamamoto et al as taught by Cappa to create a stronger shell.

It would have been obvious to one skilled in the art at the time the invention was made to have used a co-cured process to make the one-piece closed shape structure in Williams or Cronkhite et al's system as taught by Kam et al to create a stronger structure.

Claims 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamamoto et al in view of Kam et al and Cappa.

Art Unit: 3644

Hamamoto et al discloses a one-piece closed shape structure with an outer shell and frames formed on the interior portion of the outer shell but is silent on the co-cured process and the core material between the inner and outer skin. However, Kam et al teaches that co-cured structures are well known in the art. Cappa discloses that a core 38 between an inner and out skin is well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have used a core material in the outer shell of Hamamoto et al as taught by Cappa to create a stronger shell.

It would have been obvious to one skilled in the art at the time the invention was made to have used a co-cured process to make the one-piece closed shape structure in Hamamoto et al's system as taught by Cappa to create a stronger structure.

Re claims 66 and 67, using integrated formed flanges and formed wing attachment pocket with the fuselages are steps that one skilled in the art would have taken to form a stronger aircraft.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kay et al, Willden et al, Giannetti et al, Mowbray et al, Halcomb, Baer et al, Prewitt, and Russell et al teach various structures and processes to make them.

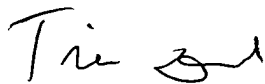
Art Unit: 3644

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 703-308-2798. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TD

A handwritten signature in cursive script, appearing to read "Tien Dinh", with a stylized flourish at the end.